# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
PAS 1687.2001.4289

September 12, 2005

Russell Galipeau
Park Superintendent
Channel Islands National Park
1901 Spinnaker Drive
Ventura, California 93003

Dear Mr. Galipeau:

Subject: 2005 Island Fox Release/Retention on the Northern Channel Islands

As you are aware, the island fox Recovery Coordination Group (RCG) discussed the impending release/retention of island foxes on the northern Channel Islands during two conference calls in July. The RCG reached preliminary release recommendations for San Miguel Island fox (*Urocyon littoralis littoralis*), Santa Rosa Island fox (*Urocyon littoralis santarosae*), and Santa Cruz Island fox (*Urocyon littoralis santacruzae*) and discussed them with your staff and Lotus Vermeer of The Nature Conservancy, in August. In formulating their recommendations, the RCG considered two recent models developed by Dr. Doak in response to the June 2005 Integrated Island Fox Recovery Team Meetings and fox reproduction this past spring, current wild population numbers, the presence/absence of golden eagles on the three islands, the ongoing pig eradication on Santa Cruz Island, and the ability of the Land Managers to effectively monitor and recapture released foxes.

I have read the recommendations and support the RCG's consensus recommendations to release one-half of the captive foxes on San Miguel Island and to retain all current captive foxes in captivity on Santa Cruz Island, believing this is what is best for island fox recovery on these two islands. I understand that both Land Managers will work together to construct additional captive facilities on Santa Cruz Island, as needed.

The RCG reached two release recommendations for captive foxes on Santa Rosa Island. Approximately half of the RCG that attended these discussions supported releasing one-half of the foxes while the remainder supported releasing approximately one-third of the foxes. One RCG member was not able to attend these discussions and could not adopt either recommendation. During the August meeting with the RCG, your staff expressed concerns about being able to meet all of the assumptions used in Dr. Doak's model run that evaluated the release of one-half of the foxes. Specifically, the your staff questioned their ability to recapture all the foxes if eagle predation begins, and indicated that recapturing all the foxes would be more feasible if one-third to one-half of the foxes were released. In light of this information, I support

the release of one-half to one-third of the foxes, based upon determinations of what is best for Santa Rosa Island fox recovery and your staff's ability to recapture foxes.

I am encouraged by the interaction and discussion that has occurred between the RCG and the Land Managers and hope this form of open communication and collaboration will continue. By incorporating Land Manager input into the refinement of these recommendations, we have continued a collaborative effort toward recovery of the island fox.

I would appreciate notification as to how you intend to proceed with the implementation of those recommendations for which you are responsible. In your response, please identify what actions you intend to take, implementation timelines, and an explanation for your decision.

The RCG also provided additional recommendations on the frequency of monitoring, establishing "triggers" for management actions, and developing standardized protocols. These recommendations seem appropriate and I would like to receive your comments about them.

If you have any questions, please contact me at (805) 644-1766, extension 313, Carl Benz at extension 311, or Eric Morrissette at extension 223.

Sincerely,

Acting for: Diane K. Noda
Field Supervisor

Enclosure

cc: Lotus Vermeer, The Nature Conservancy

# ISLAND FOX RECOVERY RECOMMENDATION
## FROM THE CHANNEL ISLAND FOX RECOVERY COORDINATION GROUP

Subject: 2005 Island Fox Release/Retention on the Northern Channel Islands

As stated in our October 4, 2004 recommendation for release/retention of captive island foxes, the Recovery Coordination Group (RCG) concluded, "that the most critical objective in the recovery of the four endangered subspecies of Channel Island fox is to increase the size of their populations as soon as possible in order to minimize demographic instability and loss of genetic diversity. Increasing the size of the populations is the most advantageous way of achieving long-term recovery and preventing extinction by stochastic events." We held this conclusion as a principle tenet as we formulated our recommendation based on available information.

In 2004, all healthy captive island foxes on Catalina Island were released and the wild population appears to be well. Therefore, there are no issues regarding release/retention of captive foxes on Catalina Island that the RCG needs to consider. Captive fox populations are still being managed on the northern Channel Islands. The RCG convened two conference calls to discuss releases in 2005. During the discussions that resulted in our determinations, the RCG considered two recent models developed by Dr. Dan Doak (U.C. Santa Cruz) in response to the June 2005 Integrated Island Fox Recovery Team Meetings, and fox reproduction this past spring, current wild population numbers, the presence/absence of golden eagles on the three islands, the ongoing pig eradication on Santa Cruz Island, and the ability of Land Managers to effectively monitor and recapture released foxes. Dr. Doak's modeling efforts incorporated virtually all available data on captive and wild recruitment and mortality. The work revealed that in the face of poor and declining captive production and some mortality, the much higher productivity of wild and released foxes more than compensates for moderate eagle predation in the face of continued eagle capture efforts.

During two conference calls in July, the RCG discussed the impending release/retention of island foxes on the northern Channel Islands. The RCG reached preliminary release recommendations for San Miguel, Santa Rosa, and Santa Cruz Islands and has already discussed them with the Channel Island National Park (CINP) Superintendent and staff, and The Nature Conservancy's (TNC) Santa Cruz Island manager.

Our release recommendations are based, in part, upon the results from Dr. Doak's model runs and the parameters of that model. However, the RCG recognizes that the strict application of post-release monitoring and recapture ability, as applied in the model, does not necessarily reflect what can be achieved in the field. Flexibility and adaptive management must be incorporated into the management strategy.

The RCG determined that all three islands must have a contingency plan (how Land Managers would recapture and manage foxes in response to excessive eagle predation) prior to any releases. The RCG submits the following island fox release/retention recommendations on the northern Channel Islands.

**San Miguel**
The RCG reached consensus to release half of the captive foxes with an associated contingency plan for recapture. This recommendation was based in part upon the results from the two models by Dr. Doak.

**Santa Rosa**
Group consensus is to have some number of foxes released under a contingency plan. There were two opinions regarding release. Approximately half of the RCG that attended these discussions supported releasing one-half of the captive foxes while the remainder supported releasing approximately one-third of the foxes. The opinion to release one-half was based in part upon the results from the two models by Dr. Doak. The opinion to release approximately one-third reflects concern regarding the uncertainty associated with the inherent limitations of the assumptions and data entered into the model, uncertainty associated with the continued presence of golden eagles, continued ungulate hunting activities, and potentially restricted activities by CINP personnel due to the ungulate hunts.

Note: One RCG member was not able to participate in the discussions and has not adopted either the majority or minority view.

**Santa Cruz**
RCG consensus is to retain all foxes in captivity pending assurance and explanation from TNC and the CINP that they have the means to maintain and manage all captive foxes successfully. This recommendation reflects concern by TNC regarding the uncertainty associated with the continued presence of golden eagles, disturbance from ongoing pig eradication activities, and safety and access issues for personnel conducting monitoring.
Furthermore, the RCG recommends the following actions concomitant with these release recommendations:

- All released foxes should be collared. And, to the best of the Land Manager's ability, all foxes in the wild should be collared at 5 months of age; and
- The Land Managers should notify the RCG of golden eagle related fox mortalities. A "trigger" of 5 mortalities attributable to golden eagle predation is proposed. Once this trigger is met, the Land Managers should coordinate a conference call with the RCG to discuss whether or not foxes should be re-captured, and/or whether other actions should be taken that will best assist island fox recovery.

The RCG strongly recommend that released foxes on San Miguel and Santa Rosa should be monitored twice per week, at a minimum, so that any mortality from eagle predation or other causes would be detected quickly, resulting in a greater likelihood of successfully locating and completing recapture efforts before high fox mortalities are reached. The RCG also wants to emphasize that island fox recovery requires development and standardization of Best Practices in the pre-release management, release methodology and post-release management and monitoring of foxes. To that end, the RCG recommends that all Land Managers work together and communicate closely to ensure that the protocols for pre-release management, release methodology and post-release management and monitoring are standardized, and where they are not comparable, that scientific methods are used to test the effects of manipulating specific variables. RCG members are available to help in determining such minimum standards and in developing experimental methodology.